

CHAPTER 2.9.1.

ACARAPISOSIS OF HONEY BEES

Article 2.9.1.1.

For the purposes of this chapter, acarapisosis, acarine disease or tracheal mite infestation is a disease of the adult honey bee *Apis mellifera* L., and possibly of other *Apis* species (such as *Apis cerana*). It is caused by the Tarsonemid mite *Acarapis woodi* (Rennie). The mite is an internal obligate parasite of the respiratory system, living and reproducing mainly in the large prothoracic trachea of the bee. Early signs of infection normally go unnoticed, and only when infection is heavy does it become apparent; this is generally in the early spring. The infection spreads by direct contact from adult bee to adult bee, with newly emerged bees under 10 days old being the most susceptible. The mortality rate may range from moderate to high.

Standards for diagnostic tests are described in the *Terrestrial Manual*.

Article 2.9.1.2.

The acarapisosis status of a country or zone/compartiment can only be determined after considering the following criteria:

- 1) a risk assessment has been conducted, identifying all potential factors for acarapisosis occurrence and their historic perspective;
- 2) acarapisosis should be notifiable in the whole country or zone/compartiment and all clinical signs suggestive of acarapisosis should be subjected to field and laboratory investigations;
- 3) an on-going awareness programme should be in place to encourage reporting of all cases suggestive of acarapisosis;
- 4) the *Veterinary Administration* or other competent authority with responsibility for the health of honey bees should have current knowledge of, and authority over, all domesticated apiaries in the whole country.

Article 2.9.1.3.

Country or zone/compartiment free from acarapisosis

- 1) Historically free status

A country or zone/compartiment may be considered free from acarapisosis after conducting a risk assessment as referred to in Article 2.9.1.2. but without formally applying a specific surveillance programme if the country or zone/compartiment complies with the provisions of Article 3.8.1.2.

- 2) Free status as a result of an eradication programme

A country or zone/compartiment which does not meet the conditions of point 1) above may be considered free from acarapisosis after conducting a risk assessment as referred to in Article 2.9.1.2. and when:

- a) the *Veterinary Administration* or other competent authority with responsibility for the health of honey bees has current knowledge of, and authority over, all domesticated apiaries

existing in the country or zone/compartiment;

- b) acarapisosis is notifiable in the whole country or zone/compartiment, and any clinical cases suggestive of acarapisosis are subjected to field and laboratory investigations;

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- c) for the 3 years following the last reported *case* of acarapisosis, annual surveys supervised by the *Veterinary Administration*, with negative results, have been carried out on a representative sample of apiaries in the country or zone/compartiment to provide a confidence level of at least 95% of detecting acarapisosis if at least 1% of the apiaries were infected at a within-apiary prevalence rate of at least 5% of the hives; such surveys may be targeted towards apiaries, areas and seasons with a higher likelihood of disease;
- d) to maintain free status, an annual survey supervised by the *Veterinary Administration*, with negative results, is carried out on a representative sample of apiaries in the country or zone/compartiment to indicate that there has been no new *cases*; such surveys may be targeted towards areas with a higher likelihood of disease;
- e) there is no self-sustaining feral population of *A. mellifera* or other possible host species in the country or zone/compartiment;
- f) the importation of the *commodities* listed in this Chapter into the country or zone/compartiment is carried out in conformity with the recommendations of this Chapter.

Article 2.9.1.4.

Regardless of the acarapisosis status of the *exporting country*, *Veterinary Administrations* should authorise without restriction the import or transit through their territory of the following commodities:

- 1) honey bee semen and honey bee venom;
- 2) used equipment associated with beekeeping;
- 3) honey, beeswax, honey bee-collected pollen, propolis and royal jelly.

Article 2.9.1.5.

Veterinary Administrations of importing countries should require:

for live queen honey bees, worker bees and drones with or without associated brood combs

the presentation of an *international veterinary certificate* attesting that the bees come from a country or zone/compartiment free from acarapisosis.

Article 2.9.1.6.

Veterinary Administrations of importing countries should require:

for eggs, larvae and pupae of honey bees

the presentation of an *international veterinary certificate* attesting that the products:

- 1) were sourced from an officially free country or zone/compartiment; or

- 2) were examined by an official laboratory and declared free of all life stages of *A. woodi*, or
- 3) have originated from queens in a *quarantine station* and were examined microscopically and found free of all life stages of *A. woodi*.